

FO9260" 69629660

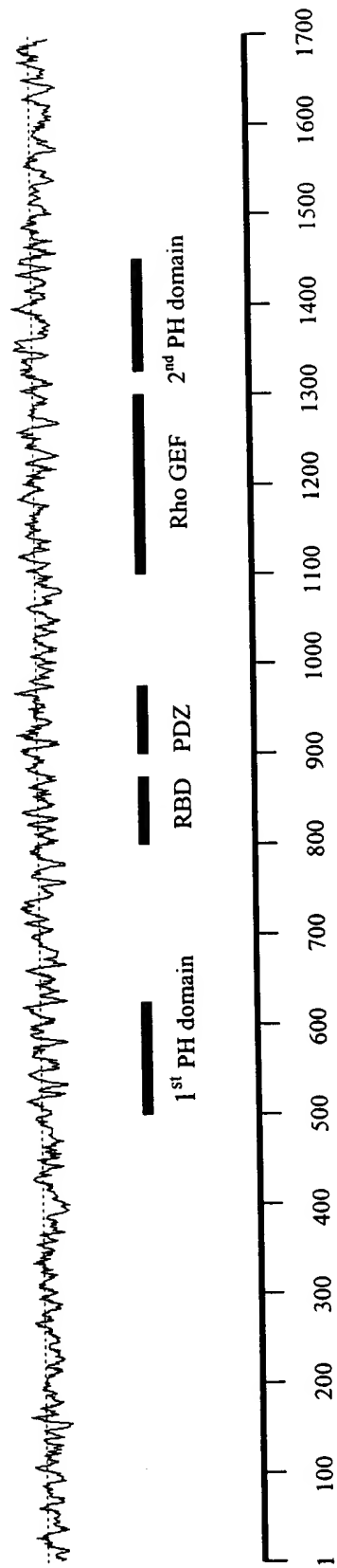


FIG. 1

RBD: domain 1 of 1, from 810 to 873: score -3.0, E = 2.3

```

      +->ktirvhLPnnqrsVevRpGmtvrDaLakalkkRGLnpsacvVrrsg
      +   vh  +n  ++V  +p  +v+D+L  a+k+R+L  ps   +
33521  810  IQTYVHFQDNHGVTVGIKPEHRVEDILT LACKMRQLEPSHYGLQ--- 853

      dpqeGekkpLdldtdissLpgPeElvvEnl<-* (SEQ ID NO:5)
      L+ d + + +p+P      +E
33521  854  -----LRKLVDDNVEYCIPAP----YEYM      873
```

FIG. 2B

PDZ: domain 1 of 1, from 890 to 975: score 33.5, E = 4.8e-06

```
*->eitlekevkrvglGfsikggsdk....givvsevlpGsgaAeagGr
    +++l k + +Gf + + d++++ + i++s+vlp+ g A G
33521 890 DVQLTKTGSVCDFGFAVTAQVDErqlsRIFISDVLPD-GLAYGEG- 934

    LkeGDvIlsvNGqdvenmsheavlaikgsgg.evtLtlvLRd<-* (SEQ ID NO:6)
    L++G I+ NG+ v+++ ++++++a+ + ++ +tL +++
33521 935 LRGNEIMTLNGEAVSDL-DLKQMEALFSEKsvGLTLIARPP 975
```

PDZ: domain 1 of 1, from 890 to 975: score 33.5, E = 4.8e-06

FIG. 2C

RhoGEF: domain 1 of 1, from 1103 to 1292: score 147.0, E = 3.3e-40

```

      *->vlkElleTEkkYvrdLeildnvymkpLreaaisskpvltppddietif
      v+ El+ TEk Yv+dL l y++pL+++ +lt+d++e++F
33521 1103 VIQELVDTEKSYVKDLSCLFELYLEPLQNET-----FLTQDEMESLF 1144

      sNiediyefhreFLkssLearisssqfedlDe....kkiepsaprlGdlF
      + +++ +ef++ FL Le+ is+s d + +++ + lG F
33521 1145 GSLPEMLEFQKVFL E-TLEDGISAS--SDFNTletpSQFRKLLFSLGGSF 1191

      lklkepflqvYgeYcsnkpyAqelleklrqaasnpqFaefldeveassnt
      l + ++ +++Y +c+n+ +q++le+ a++ +F+ fld + + +
33521 1192 LYY-ADHFKLYSGFCANHIKVQKVLER---AKTDKAFKAFLDARNPTKQH 1237

      gAkddavkltLqsLLlkPvqRilrYpLLLkeLLkhtpegedqpdredLkk
      tL+s+L+kPvqR+l+YpLLLkeL+++t+ +++++ L +
33521 1238 S-----STLESYLIKPVQRVLKYPLLLKELVSLTDQ--ESEEHYHLTE 1278

      aldllqdlaksiNe<-(SEQ ID NO:7)
      al++++ +a++iNe
33521 1279 ALKAMEKVASHINE 1292

```

FIG. 2D

PH: domain 2 of 2, from 1353 to 1455: score 4.3, E = 8.7

```
*->fvLfnnvLllykdsK.....kkpkgsipLsg
    fv+++ v+l yk+  + +++ ++++++ +++++ +k +  ip+s
33521 1353   FVFKRAVILVYKENCKlkkklpsnsrpahnstdldpFKFRWLIPISA 1399

    cqvek.pd.....kncFeirt.dr.....tlllqaeseeerkeWvka
    +qv+ +   +++++ +e++++ + ++++++ + l+++++e++   vk
33521 1400 LQVRLgNPagtenNSIWELIHtKSeiegrpetIFQLCCSDSESKTNIVKV 1449

    iqsair<-* (SEQ ID NO:8)
    i+s++r
33521 1450 IRSILR      1455
```

FIG. 2E

PH_update: domain 1 of 2, from 507 to 622: score 63.3, E = 5.2e-15

```

      *->vikeGwLlkks.....k.swkkryfvLfngvLllyysk
      v + GwL k + ++ ++      +++wk++++L++ +Ll+y+
33521  507  VRRAGWLFFKPlvtvqkerklelvaRrKWKQYWVTLKGCTLLFYETY 553

      .....kpkgssipLsgcsvre.p.....cFeivt.dr.tlllqAe
      ++++ +++++p+ ++ ++ +v+ p+++++++F+++++ ++++l+qA
33521  554  gknsmdqssAPRCALFAEDSIVQSVpehpkkenVFCLSNsFGdVYLFQAT 603

      seeereeWvealqsaiaka<-* (SEQ ID NO:9)
      s+ ++e Wv+a +sa+a++
33521  604  SQTDLNWWVTAVHSACASL      622

```

FIG. 3A

PH_update: domain 2 of 2, from 1326 to 1457: score 17.7, E = 0.28

```

      *->vikeGwLlkks.....k.swkkryfvLfngvLlyyksk.....
          +++++ + + ++ ++          fv+++ v+l yk+ + +++
33521  1326  LLMHSTVSWLNpflslgkaRkDLELTVFVFKRAVILVYKENcklkkk 1372

          .....kpkg sipLsgcsvre.p.....cFeivt.d
          +++++ +++++ ++ k +  ip+s ++vr + + + +++++ +e+++++
33521  1373  lpsnsrpahnstdldpfKFRWLIPISALQVRLgNpagtennsIWELIHtK 1422

          r.....tlllqAeseeereeWvealqsaiaka<-* (SEQ ID NO:13)
          + +++++ + l+++++e+++  v+ ++s ++++
33521  1423  SeiegrpetIFQLCCSDSESKTNIVKVIRSILREN      1457

```

FIG. 3E

FIG. 3E